rest. I put this forth as a tentative explanation for many nocturnal attacks—an explanation which I have not

seen in the literature.

I agree fully with Doctor Cummings that we should avoid "fuzzy-mindedness," but the fact remains that patients complain of pain located in a definite place, often far from sub-sternal, and who are we, in the present state of our knowledge, to say that the impulse has spilled over in every case. I wont deny that it may have originated outside of the heart muscle in the beginning, as I feel that as yet enough certainly does not attend our knowledge of the exact nature of the disease.

I appreciate the careful discussion of this paper, which only attempted to place angina pectoris before us with a possible working hypothesis upon which to conduct treatment.

## QUESTIONABLE DIAGNOSTIC METHODS

By JOHN W. SHUMAN, M. D., Los Angeles

There are more than two sides to any controversial subject, and the subject Shuman discusses is admittedly a many-faced one. This is indicated in some of the discussions on his paper.

It is logical to expect that some of Shuman's statements will produce some strong reactions. This he expects. Some may even censure the editor for permitting the frank discussion. My reply is that discussion, however frank, is welcome, so long as it maintains an impersonal character and does not endanger the cause of better medicine by washing dirty linen in public places. All writers must bear in mind the fact that California and Western Medicine is a public medium and that each issue is probably examined by several thousand non-medical people, including those who are looking for weapons to use against physicians.

Comment on the question raised by Shuman or any other will be published if it complies with the policies established for the guidance of the editor.

—EDITOR.

Medicine being made uselessly complicated and ex-

Over-specialization not an asset to the cause of better medicine.

Good clinical judgment still the mainstay of the physician.

Standardization of laboratory and other diagnostic methods recommended.

Too many consultants more harmful than none.

DISCUSSION by T. C. Edwards, Salinas; Rene Bine, San Francisco; Dudley Fulton, Los Angeles; W. C. Shipley, Cloverdale.

POLLOWING the World War many diagnostic clinics were formed. Fads for surveying the health of communities became prominent. It is an axiom that anything, "too prematurely born, soon withers away and dies." I believe this to be true of the activities just mentioned. We, as physicians, must not lose sight of the best interests of our patients. It is not to the best interest of the average sick individual to be examined by too many physicians. In pneumonia this is very true for too much examaining disturbs the patient's rest both physically and mentally; and it is one reason why the wealthy man, suffering from pneumonia, who can afford many physicians, and thus too many examinations, has less chance for recovery than the poor patient who has only nature, assisted by his personal physician, to depend upon.

My students have had difficulty in understand-

ing my attitude in not letting them "thoroughly and painstakingly examine the pneumonia patient two and three times a day," until they have realized and appreciated the value of rest as a therapeutic agent, and have learned that inspection is more valuable than extensive percussion and auscultation in the successful management of the pneumonia patient.

The psychic effect upon the patient who is passed from one consultant to another is not for lasting good. The patient sooner or later realizes that he is no better off physically by having too many doctors. Mistakes like the following are more frequent than they should be or than they would be if direction in diagnosis and treatment were more completely centralized in one directing physician.

A man of 45 years, while paying a last visit to his daughter, was referred to a most competent radiologist 350 miles away for a series of x-ray treatments of the abdomen, for "an intestinal carcinosis springing from carcinoma of the rectum, diagnosed after surgical exploration and pronounced inoperable." The dosage was already mapped out so my technician had only to deliver the directed treatment dosage. A year or so later a doctor recalled the case to my mind, and said, "that man came back to his home town and to me, given up by all you specialists; but I gave him potassium iodid and his 'tumor masses' are all gone. I had treated his early syphilis fifteen years before."

The young doctor of today, following his year of hospital internship with its two months' laboratory service, during which time he sees "The Chief" making diagnoses from "specimen reports," enters his practice with the impression that pipettes, tubes, slides, scopes, blood chemistry apparatus and what not are essential in diagnosing disease. There is no doubt that the clinical laboratory is a most valuable aid in diagnosis, but blind credence in a test or group of tests alone leads too easily to the examiner's conviction of the correctness (?) of his diagnosis and to the selling of his opinion as a fact to the patient.

There are three classes of individuals interested in diagnostic methods. First, the honest physicians with personal interest, critical minds and dispassionate judgment. Some call these men scientific. They are intelligent, common sense observers. Hippocrates, Sydenham, and Osler were striking examples of this class which is not large enough.

The second class are physicians and persons engaged in caring for the sick, who are especially moved by sentiment; they lack proper critical sense; they seek for diagnosis to be made easy. This class is large.

The third class are those engaged in the manufacture of diagnostic instruments and their accessories. Too many of this and some of the second class not only realize, but make use of the greatest of all human weaknesses, viz., "the willingness of people to believe." The innumerable followers of cults, pathics and actics, who have little training and conceptions of diagnosis, treat only for the fee's sake, and merit no consideration here.

If we physicians cease to be such easy prey to the get-rich-quick schemes of promoters and manu-

facturers of alleged diagnostic instruments of precision and their accessories, and lose the willingness to believe that pathognomonic symptoms frequently exist, the world will be better off.

Ten years ago sero diagnosis was at its height. Pernicious anemia was "easily diagnosed" by a color index, greater than one. Syphilis was unmistakably recognized by enlarged bilateral postauricular and epitrochlear glands; and a too high bloodpressure was a cause for prognosing early death. Now Abderhalden's test is defunct; a primary anemia does not exist; it takes more than adenopathy to make the diagnosis of syphilis; and we are learning that we did not know so much about blood pressure at that time. The Wassermann test is now standardized and its limitations realized. recognized fact at present that a "frank, reliable Wassermann reaction is evidence of syphilis; and that, in the absence of a syphilitic history, the diagnosis of syphilis should be made with great care; that the test should be verified by repeated tests, and that a negative Wassermann is of little value."

All new and elaborate diagnostic procedures should be standardized and given a first, second, third, fourth or no place rating in diagnostic value, depending upon their practicability and dependability. If diagnostic procedures had to undergo an evaluation similar to that of medical remedies before gaining recognition, it would be a step in the right direction. Individual physicians have their favorite diagnostic methods, but the average diagnostician, however, uses the average diagnostic methods in an average manner, and thereby his average diagnostic deductions, roughly speaking, are about 80 per cent correct. Some of the procedures in vogue that should be standardized are gastric, renal, spinal fluid and metabolic tests.

In my work gastric analyses have been superseded by radiological studies. I find the roentgen ray more dependable and less costly to the patient. Renal function tests are of no value in distinguishing uremia from other conditions, or in prognosis. Basal metabolism studies, if properly used, may give a certain amount of valuable information, but as no two men can use the same machine on the same patient and get the same deductions, I feel it is still too embryonic and too costly a procedure for practical clinical medicine. Spinal puncture is too common a procedure and is not as simple as venous puncture. The diagnosis of cerebro-spinal meningitis should be made before a puncture is thought of, and then instituted more as a therapeutic rather than a diagnostic procedure. I never make a spinal puncture unless I expect to find increased pressure or micro-organisms.

Other procedures which may be viewed along these lines are Lyon's A, B, and C bile tests, pneumoperitoneum technic, catheterization of ureters and blood chemistry. Some diagnostic procedures may be harmful because they are ofttimes performed by eager and untrained hands.

If the clinician does all the work on the patient himself, using the laboratories, the technique of which he supervises, for "findings," and then interprets the findings himself with a definite notion of their practical application, all will be well. Just

what should and should not be a routine is a matter of choice and habit. I secure history and physical examination findings and have them typewritten on a history card. Blood pressure reading and fluoroscopic examination are a part of my general physical examination, just as is testing the "station, gait, and reflexes." But I do not bismuthize and fluoroscope the gastro-intestinal tract when there are no subjective or objective symptoms of disease indicating such procedure. A record of temperature, pulse, respiration, weight, urine and blood is made for each patient. No one of these will make the correct diagnosis, and none of these is observed and entered simply to elaborate a record.

A certain diagnostic procedure which is too often used is "exploratory operation." It is the coward's flag under which he marches to make a diagnosis. By this is not meant that an "acute abdominal crisis," for example, intestinal obstruction, is not a diagnosis sufficient to call for abdominal section. But I do mean that those abdominal explorations which are meddlesome surgery may be a menace and a crime too often committed in the name of

MEDICINE.

Westlake Professional Building.

## DISCUSSION

T. C. Edwards, M. D. (Salinas, California) - Doctor Shuman's paper has more real meat in it than any I have read for a long time. What he says about frequent exami-

nation of patients is a fact.

After a definite diagnosis of pneumonia has been made, what possible benefit is it to the patient for you to "go over" his chest daily? What information can one gather from these daily percussions front and back that cannot be more satisfactorily had by referring to the clinical chart, aided by the power of observation? Vastly more good may be accomplished by making a friendly visit. Feel the patient's pulse, and as you do so, give his hand a caressing little pat, and thus let him know, as Oliver Wendell Holmes suggests, that "you are all his own." Make your mere presence in the sick chamber of more value to the patient than your medicine.

The suggestion by Shuman of having diagnostic pro-

cedures standardized is a good one. This would give the stamp of reliability where now there is frequently definite uncertainty in relation to some of these so-called

aids.

Ray Lyman Wilbur has expressed the opinion that the physician of the future must stand upon a broad foundation; must be fully qualified to diagnose and treat the ills of the sick; and, above all, he will remember that the individual is a very complex entity requiring very careful PERSONAL attention.

Shuman's idea of having the physician do all the work of supervising, collating and interpreting laboratory and other findings (not delegating it to others) is in accord with Wilbur's judgment and good common When this is done there will be less use for sense.

specialists.

I wish to emphasize Shuman's views about spinal puncture, exploratory operations and the like. take a little more time in the study of our patients, tomorrow or next day there may be such change in conditions that the "interesting" case may look altogether different; in fact may be on the road to recovery. Remember what Holmes says:

"Of all the ills that suffering man endures, The largest fraction liberal NATURE cures!" I wish to commend the doctor on the excellence and timeliness of this paper.

RENE BINE, M.D. (380 Post Street, San Francisco)-Some thirty years or more ago, so I was told, two recent graduates of a European medical college settled in a community where there was but one doctor, an old-timer, an old fogey, they considered him, untrained in the use

of high-power microscopes, culture media, bacterial stains, and the like. It was a question of but a short time before the community would make its comparisons, and then the old fogey's patients, and others from the surrounding parts, would crowd the waiting rooms of the two scientifically trained men.

But alas! The stupid community must have been blind. The old doctor held his patients, and the young men had plenty of time for reflection. But just as they were despairing, influenza appeared, and in a short time there was such an epidemic as to make it impossible for even three men to properly handle the situation. The young men were in such demand, day and night, that for weeks they hardly met.

Then late one afternoon, one of them came back to his room, sent for the landlady, told her he was sick, all in, possibly going to die, and please send for the old doctor, but please not to tell his chum about this, as he did not wish to hurt his feelings. Upon which the landlady replied not to worry, she would not say a word, the old doctor would be there shortly, she had just sent for him to come and take care of his friend!

Shuman evidently agrees with those of us, who, when sick, prefer to have the old doctor, or possibly a man trained by so-called "old doctors." For the good old doctors are primarily clinicians, men who question their patients, who examined them thoroughly and intelligently, whose judgment is sound, and who never lose sight of the fact that they are not treating a disease, but a patient, an individual whose mental and moral state must be taken into consideration—always.

And Shuman, no doubt, would prefer to be in the hands of the man who keeps proper case records, and who does not trust to his memory, plus a few "laboratory reports," for all of his data.

There is no doubt that in many American medical schools too much emphasis has been placed upon the newer laboratory methods. We often hear of patients being sent for Wassermann tests before histories are taken or physical examinations made. Frank Billings told me about a year ago that he had referred a patient to a hospital some time before because of symptoms suggesting an enlarged prostate. A couple of days later, visiting the hospital, he looked for his friend and found him in the chemical laboratory where every possible functional renal test was being carried out, blood tests galore, x-rays had been taken of most of his bones to rule out metastases, but no physical examination had been even started!

Repeated clinical examinations often enable one to reach conclusions in a given case; occasionally even the simple review of a history will do the trick.

I agree with Shuman that blood-pressure readings should be a routine procedure. It is a great satisfaction to be able to tell a patient, year in, year out, that his physical status has shown but little change. A routine urine examination is essential. No physician can be criticized who omits fluoroscopic examinations as a routine procedure, not to mention the fact that many patients are seen often at their homes only.

Nor can too much reliance be placed upon the "findings" of the radiologist, aye, of the best. How often does a negative report really exclude gall-stones? How often does a positive report prove duodenal ulcer, chronic appendicitis, abdominal adhesions, or even cancer? How many teeth have been unnecessarily extracted because of tiny shadows?

Doctor Shuman's suggestion that new and elaborate diagnostic procedures be standardized is a good one. It is also quite important, I believe, that the medical teachers of this country, by precept and by example, try to turn out good clinicians, and that at our medical meetings, and more especially in our county societies, more attention be paid to the presentation of well-studied clinical material than to the highly specialized report of a pathological rarity.

DUDLEY FULTON, M. D. (Pacific Mutual Bldg., Los Angeles)—In my opinion Shuman's very interesting paper offers no constructive criticism other than making a plea for more thoughtful analysis of clinical and laboratory findings.

Every experienced clinician agrees with the author that

there is too much test-tube, x-ray and serological influence in modern medicine. Yet who would attempt diagnostic work without utilizing the aid these diagnostic methods give when properly valued?

I believe Shuman could write a better paper covering

I believe Shuman could write a better paper covering the neglect of these diagnostic methods, as it is undoubtedly true that they are more frequently neglected than abused and improperly interpreted. A case in point: The confusion in diagnosis and treatment of the case of "Intestinal Carcinosis" he reports in this paper would probably have been avoided had a competent Wassermann test been performed.

In regard to the suggestion that diagnostic methods be standardized similarly to medical remedies and published weekly in the Journal of the American Medical Association, it should be pointed out that proper valuation of either can be demonstrated only by their application to general practice. This is the contribution of the clinician to progressive medicine and which the research worker has always solicited.

While we are willing to admit, for the sake of argument, that the art of medicine may possibly not measure up to the standards established by such famous clinicians as Hippocrates, Sydenham and Osler, yet it must be conceded that the science of medicine, as displayed by the general practitioner, manifests greater accuracy in diagnosis and, therefore, therapeusis, than ever before. We are inclined to believe that this is the result not only of more advanced knowledge of biological laws, but of the application of the latter, to everyday practice, by the diagnostic methods under discussion.

W. C. Shipley, M. D. (Cloverdale, California)—Doctor Shuman has presented some very appropriate facts in his paper. There can be no doubt as to the ill effects of excessive and too frequently repeated examinations of the gravely ill, especially in pneumonias.

To my mind one good consultant, when a case demands it, is as good for all parties concerned as a far greater number.

With the average high-class medical man, a consultant is only necessary to confirm the attending physician's findings, help him in making a diagnosis and sharing in the moral responsibility.

The diagnostic clinics, while beautiful in theory, are not always perfectly satisfactory in practice.

There can be no question but that the accessory diagnostic means of x-ray and laboratory should be standardized and the simplest and most satisfactory selected for general use for no medical practitioner, no matter how keen his powers of observation and his ability to analyze the findings of his special senses, can depend entirely upon case history and clinical evidence; neither should these fundamentally important elements in the practice of scientific medicine be neglected in favor of laboratory methods.

Intelligent use of all diagnostic measures should be employed in arriving at a definite conclusion as to the cause of a patient's deviation from a normal standard of health

SHUMAN (in closing)—Discussion greatly appreciated.

Surgical Procedures in Jaundiced Patients—A practical application is made by E. Starr Judd, Rochester, Minn. (Journal A. M. A.), of the work of McNee, van den Bergh, Aschoff and Mann to the surgical treatment of jaundiced patients. The most valuable aid in the handling of jaundiced patients is the van den Bergh test for the quantity and quality of bile in the serum. Much has been accomplished in the preoperative treatment of jaundiced patients, which means more than just the intravenous administration of calcium. Judd believes that in deeply jaundiced patients the common ducts should usually be drained with a tube, and the gallbladder should be drained if necessary, but not removed. Hepaticoduodenostomy is the procedure of choice in cases of postoperative stricture. Cholecystogastrostomy offers considerable relief in certain types of inoperable malignant diseases, and also seems helpful in cases of hepatic infectious jaundice. Multiple needle punctures in cases in which the liver is badly damaged allow a certain amount of blood and fluid to drain out, and may tend to restore the function of the liver.